

Table C.5-19. Transit, light crude (ES-Trans-1c): Shoreline area oiled above 100 g/m² (0.1 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	322,983	0.125	-	-	-	-	-	-
95th	757,262	0.292	-	-	-	-	-	-
Maximum	1,186,952	0.458	256,093	0.099	499,104	0.193	929,367	0.359
Mean	359,554	0.139	38,382	0.015	195,081	0.075	125,981	0.049
Std. Dev.	241,746	0.093	36,757	0.014	107,786	0.042	172,976	0.067
Mean + 2 Std. Dev.	843,046	0.326	111,896	0.043	410,653	0.159	471,933	0.182

Table C.5-20. Transit, light crude (ES-Trans-1c): Shoreline area oiled above 1000 g/m² (1 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	296,594	0.115	-	-	-	-	-	-
95th	652,852	0.252	-	-	-	-	-	-
Maximum	867,410	0.335	241,522	0.093	361,421	0.140	653,999	0.253
Mean	296,273	0.114	36,234	0.014	166,999	0.064	92,937	0.036
Std. Dev.	185,201	0.072	34,918	0.013	91,669	0.035	137,639	0.053
Mean + 2 Std. Dev.	666,675	0.257	106,070	0.041	350,337	0.135	368,215	0.142

Table C.5-21. Transit, heavy crude (ES-Trans-hc): Shoreline area oiled above 1 g/m² (0.001 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	345,932	0.134	-	-	-	-	-	-
95th	850,199	0.328	-	-	-	-	-	-
Maximum	1,162,282	0.449	248,808	0.096	479,025	0.185	894,946	0.346
Mean	377,494	0.146	39,490	0.015	207,071	0.080	130,800	0.051
Std. Dev.	250,953	0.097	36,848	0.014	112,988	0.044	181,299	0.070
Mean + 2 Std. Dev.	879,400	0.340	113,186	0.044	433,047	0.167	493,398	0.191

Table C.5-22. Transit, heavy crude (ES-Trans-hc): Shoreline area oiled above 10 g/m² (0.01 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	345,932	0.134	-	-	-	-	-	-
95th	850,199	0.328	-	-	-	-	-	-
Maximum	1,127,861	0.435	248,808	0.096	479,025	0.185	860,525	0.332
Mean	377,045	0.146	39,472	0.015	206,985	0.080	130,456	0.050
Std. Dev.	249,859	0.096	36,826	0.014	112,891	0.044	180,036	0.070
Mean + 2 Std. Dev.	876,763	0.339	113,124	0.044	432,767	0.167	490,528	0.189

Table C.5-23. Transit, heavy crude (ES-Trans-hc): Shoreline area oiled above 100 g/m² (0.1 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	343,063	0.132	-	-	-	-	-	-
95th	850,199	0.328	-	-	-	-	-	-
Maximum	1,124,993	0.434	248,635	0.096	476,157	0.184	860,525	0.332
Mean	374,326	0.145	39,420	0.015	205,350	0.079	129,423	0.050
Std. Dev.	248,584	0.096	36,826	0.014	111,995	0.043	179,158	0.069
Mean + 2 Std. Dev.	871,494	0.336	113,072	0.044	429,340	0.166	487,739	0.188

Table C.5-24. Transit, heavy crude (ES-Trans-hc): Shoreline area oiled above 1000 g/m² (1 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	328,720	0.127	-	-	-	-	-	-
95th	748,084	0.289	-	-	-	-	-	-
Maximum	901,831	0.348	246,111	0.095	410,183	0.158	688,420	0.266
Mean	334,320	0.129	38,575	0.015	187,193	0.072	108,426	0.042
Std. Dev.	211,061	0.081	36,218	0.014	102,918	0.040	151,163	0.058
Mean + 2 Std. Dev.	756,442	0.292	111,011	0.043	393,029	0.152	410,752	0.159

Table C.5-25. Alternate Berth, diesel (ES-Alt-30K-d): Shoreline area oiled above 1 g/m² (0.001 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	283,974	0.110	-	-	-	-	-	-
95th	675,225	0.261	-	-	-	-	-	-
Maximum	1,145,073	0.442	245,508	0.095	413,052	0.159	929,367	0.359
Mean	300,794	0.116	32,206	0.012	176,609	0.068	91,904	0.035
Std. Dev.	200,031	0.077	31,061	0.012	87,593	0.034	141,074	0.054
Mean + 2 Std. Dev.	700,856	0.271	94,328	0.036	351,795	0.136	374,052	0.144

Table C.5-26. Alternate Berth, diesel (ES-Alt-30K-d): Shoreline area oiled above 10 g/m² (0.01 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	257,010	0.099	-	-	-	-	-	-
95th	629,331	0.243	-	-	-	-	-	-
Maximum	1,046,399	0.404	243,243	0.094	392,973	0.152	860,525	0.332
Mean	282,138	0.109	30,251	0.012	166,799	0.064	85,020	0.033
Std. Dev.	182,202	0.070	30,900	0.012	82,985	0.032	130,626	0.050
Mean + 2 Std. Dev.	646,542	0.250	92,051	0.036	332,769	0.128	346,272	0.134

Table C.5-27. Alternate Berth, diesel (ES-Alt-30K-d): Shoreline area oiled above 100 g/m² (0.1 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	223,737	0.086	-	-	-	-	-	-
95th	495,662	0.191	-	-	-	-	-	-
Maximum	654,574	0.253	227,179	0.088	278,237	0.107	481,894	0.186
Mean	236,277	0.091	26,699	0.010	142,044	0.055	67,465	0.026
Std. Dev.	135,860	0.052	28,050	0.011	69,037	0.027	98,988	0.038
Mean + 2 Std. Dev.	507,997	0.196	82,799	0.032	280,118	0.108	265,441	0.102

Table C.5-28. Alternate Berth, diesel (ES-Alt-30K-d): Shoreline area oiled above 1000 g/m² (1 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	51,632	0.020	-	-	-	-	-	-
95th	211,689	0.082	-	-	-	-	-	-
Maximum	305,200	0.118	22,947	0.009	134,816	0.052	240,947	0.093
Mean	62,801	0.024	1,733	0.001	28,369	0.011	32,700	0.013
Std. Dev.	66,332	0.026	0	0	34,476	0.013	50,866	0.020
Mean + 2 Std. Dev.	195,465	0.075	1,733	0.001	97,321	0.038	134,432	0.052

Table C.5-29. Alternate Berth, light crude (ES-Alt-30K-lc): Shoreline area oiled above 1 g/m² (0.001 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	115,884	0.045	-	-	-	-	-	-
95th	439,442	0.170	-	-	-	-	-	-
Maximum	797,994	0.308	177,354	0.068	220,868	0.085	585,157	0.226
Mean	161,441	0.062	14,642	0.006	92,048	0.036	54,729	0.021
Std. Dev.	135,978	0.053	20,293	0.008	44,553	0.017	101,743	0.039
Mean + 2 Std. Dev.	433,397	0.167	55,228	0.021	181,154	0.070	258,215	0.100

Table C.5-30. Alternate Berth, light crude (ES-Alt-30K-lc): Shoreline area oiled above 10 g/m² (0.01 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	113,589	0.044	-	-	-	-	-	-
95th	439,442	0.170	-	-	-	-	-	-
Maximum	714,810	0.276	165,221	0.064	215,132	0.083	481,894	0.186
Mean	156,467	0.060	14,227	0.005	90,240	0.035	51,976	0.020
Std. Dev.	126,768	0.049	19,187	0.007	42,811	0.017	94,753	0.037
Mean + 2 Std. Dev.	410,003	0.158	52,601	0.020	175,862	0.068	241,482	0.093

Table C.5-31. Alternate Berth, light crude (ES-Alt-30K-lc): Shoreline area oiled above 100 g/m² (0.1 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	92,937	0.036	-	-	-	-	-	-
95th	370,600	0.143	-	-	-	-	-	-
Maximum	612,694	0.237	154,895	0.060	160,632	0.062	413,052	0.159
Mean	133,192	0.051	13,820	0.005	75,296	0.029	44,058	0.017
Std. Dev.	109,306	0.042	18,321	0.007	35,316	0.014	83,213	0.032
Mean + 2 Std. Dev.	351,804	0.136	50,462	0.019	145,928	0.056	210,484	0.081

Table C.5-32. Alternate Berth, light crude (ES-Alt-30K-lc): Shoreline area oiled above 1000 g/m² (1 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	21,800	0.008	-	-	-	-	-	-
95th	174,974	0.068	-	-	-	-	-	-
Maximum	208,821	0.081	127,932	0.049	114,737	0.044	172,105	0.066
Mean	44,535	0.017	11,852	0.005	19,247	0.007	13,424	0.005
Std. Dev.	53,516	0.021	15,679	0.006	25,589	0.010	30,021	0.012
Mean + 2 Std. Dev.	151,567	0.059	43,210	0.017	70,425	0.027	73,466	0.028

Table C.5-33. Alternate Berth, heavy crude (ES-Alt-30K-hc): Shoreline area oiled above 1 g/m² (0.001 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	125,063	0.048	-	-	-	-	-	-
95th	398,710	0.154	-	-	-	-	-	-
Maximum	633,920	0.245	166,455	0.064	206,526	0.080	447,473	0.173
Mean	162,928	0.063	14,149	0.005	95,059	0.037	53,696	0.021
Std. Dev.	118,423	0.046	19,221	0.007	42,670	0.016	91,053	0.035
Mean + 2 Std. Dev.	399,774	0.154	52,591	0.020	180,399	0.070	235,802	0.091

Table C.5-34. Alternate Berth, heavy crude (ES-Alt-30K-hc): Shoreline area oiled above 10 g/m² (0.01 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	122,195	0.047	-	-	-	-	-	-
95th	395,842	0.153	-	-	-	-	-	-
Maximum	633,920	0.245	166,455	0.064	203,658	0.079	447,473	0.173
Mean	160,747	0.062	14,148	0.005	93,912	0.036	52,664	0.020
Std. Dev.	117,155	0.045	19,221	0.007	42,331	0.016	89,312	0.034
Mean + 2 Std. Dev.	395,057	0.153	52,590	0.020	178,574	0.069	231,288	0.089

Table C.5-35. Alternate Berth, heavy crude (ES-Alt-30K-hc): Shoreline area oiled above 100 g/m² (0.1 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	100,969	0.039	-	-	-	-	-	-
95th	390,105	0.151	-	-	-	-	-	-
Maximum	619,578	0.239	165,222	0.064	172,105	0.066	447,473	0.173
Mean	141,304	0.055	14,038	0.005	81,119	0.031	46,124	0.018
Std. Dev.	108,453	0.042	19,142	0.007	36,577	0.014	81,039	0.031
Mean + 2 Std. Dev.	358,210	0.138	52,322	0.020	154,273	0.060	208,202	0.080

Table C.5-36. Alternate Berth, heavy crude (ES-Alt-30K-hc): Shoreline area oiled above 1000 g/m² (1 mm thick).

Statistic	Total All Shorelines (m ²)	Total All Shorelines (mile ²)	Rock, Gravel and Artificial shoreline (m ²)	Rock, Gravel and Artificial shoreline (mile ²)	Sand beach (m ²)	Sand beach (mile ²)	Wetlands and Mudflats (m ²)	Wetlands and Mudflats (mile ²)
50th	40,732	0.016	-	-	-	-	-	-
95th	187,021	0.072	-	-	-	-	-	-
Maximum	246,110	0.095	141,126	0.054	117,605	0.045	172,105	0.066
Mean	55,045	0.021	12,231	0.005	25,931	0.010	16,867	0.007
Std. Dev.	57,336	0.022	16,748	0.006	27,822	0.011	32,972	0.013
Mean + 2 Std. Dev.	169,717	0.066	45,727	0.018	81,575	0.031	82,811	0.032

C.6 Exposure for Representative Individual Model Runs.

To examine the potential impacts to shorelines, sensitive sites and biological resources from these spills, three representative runs were selected from the 100 stochastic runs based on:

1. the worst case run for impacts to critical resources to the California mainland shore;
2. the worst case run for impacts to critical resources to the islands along Santa Barbara Channel (San Miguel Island, Santa Rosa Island, Santa Cruz Island, and Anacapa Island); and
3. the worst case run for oiling to the water column, selected as the run resulting in the maximum amount of oil in the water column.

In this section, the oil movements for the representative runs are shown, as plots of water surface exposed to floating oil (g/m^2) at any time after the spill. Thus, these are cumulative plots of the oil trajectory and amount of exposure.

Table C.6-1 lists the start dates for the worst case model runs for each individual run examined of the scenarios. The selection of start date and time for the 1,000 bbl and 2,500 bbl spills evaluated were based worst case conditions for the larger volume (11,000 bbl, 12,090 bbl and 275,000 bbl) spills for the terminal and transit locations, respectively.

The 1,000 bbl spills at the Terminal were run for the same conditions as the worst case spills to the California mainland for the 11,000 bbl and 12,090 bbl diesel and crude spills at the Terminal, respectively. The figures for the 1,000 bbl scenarios are not included here. However, the figures for the 1,000 bbl diesel scenario would look the same as those for the worst case 11,000 bbl diesel spill to the California mainland, except the mass (g/m^2) would be 9% of that shown in Figures C.6-1 to C.6-4. The figures for the 1,000 bbl light crude scenario would look the same as those for the worst case 12,090 bbl light crude spill to the California mainland, except the mass (g/m^2) would be 8.3% of that shown in Figures C.6-13 to C.6-15. Similarly, the figures for the 1,000 bbl heavy crude scenario would look the same as those for the worst case 12,090 bbl heavy crude spill to the California mainland, except the mass (g/m^2) would be 8.3% of that shown in Figures C.6-22 to C.6-24.

The 2,500 bbl transit spills were run for the same conditions as all three of the worst case spills for the 275,000 bbl transit spills. The figures for the 2,500 bbl scenarios are not included here. However, the figures for the 2,500 bbl scenarios would look the same as those for the 275,000 bbl scenarios, except the mass (g/m^2) would be 0.9% of that shown in Figures C.6-31 to C.6-66. For the transit spills of 2,500 bbl diesel fuel oil, the mass (g/m^2) on the water surface and shoreline will be 0.9% of that shown in Figures C.6-31 to C.6-42. For the transit spills of 2,500 bbl light crude oil, the footprint is the same as shown for the 275,000 bbl light crude spill, however the mass (g/m^2) will be 0.9% of that shown

in Figures C.6-43 to C.6-54. For the transit spills of 2,500 bbl heavy crude oil, the footprint is the same as shown for the 275,000 bbl heavy crude spill, however the mass (g/m²) will be 0.9% of that shown in Figures C.6-55 to C.6-66.

Table C.6-1. Start dates for representative worst case runs for each model scenario.

Scenario	Date for worst case run to CA mainland	Date for worst case run to islands along Santa Barbara Channel	Date for worst case run to water column
Terminal, diesel (ES-Pipe-1k-d)*	23-Nov-2004	-	-
Terminal, light crude (ES-Pipe-1k-lc)*	23-Nov-2004	-	-
Terminal, heavy crude (ES-Pipe-1k-hc)*	23-Nov-2004	-	-
Terminal, diesel (ES-Pipe-11k-d)	23-Nov-2004	19-Jan-2001	17-Apr-1995
Terminal, light crude (ES-Pipe-12k-lc)	23-Nov-2004	19-Jan-2001	13-Aug-1999
Terminal, heavy crude (ES-Pipe-12k-hc)	23-Nov-2004	19-Jan-2001	21-Oct-2003
Transit, diesel (ES-trans-d)	31-Oct-2002	12-Feb-2001	12-Mar-2002
Transit, light crude (ES-trans-lc)	31-Oct-2002	19-Jan-2001	10-Mar-1996
Transit, heavy crude (ES-trans-hc)	27-Sep-1995	12-Feb-2001	10-Jan-2000
Transit, diesel, scaled (ES-trans-d-2K**)	31-Oct-2002	12-Feb-2001	12-Mar-2002
Transit, light crude, scaled (ES-trans-lc-2K**)	31-Oct-2002	19-Jan-2001	10-Mar-1996
Transit, heavy crude, scaled (ES-trans-hc-2K**)	27-Sep-1995	12-Feb-2001	10-Jan-2000
Alternate, diesel (ES-alt-30k-d)	31-Oct-2002	19-Jan-2001	12-Mar-2002
Alternate, light crude (ES-alt-30k-lc)	31-Oct-2002	19-Jan-2001	6-Feb-2001
Alternate, heavy crude (ES-alt-30k-hc)	31-Oct-2002	23-Nov-2004	10-Mar-1996

* Analysis of impacts for these three scenarios were made for the worst case runs based on the 11,000 bbl diesel and 12,090 bbl light or heavy crude terminal spill results, by running the scenarios with a volume of 1,000 bbl.

** Analysis of impacts for these three scenarios were made for the worst case runs based on the 275,000 bbl transit spill results, by running the scenarios with a volume of 2,500 bbl.

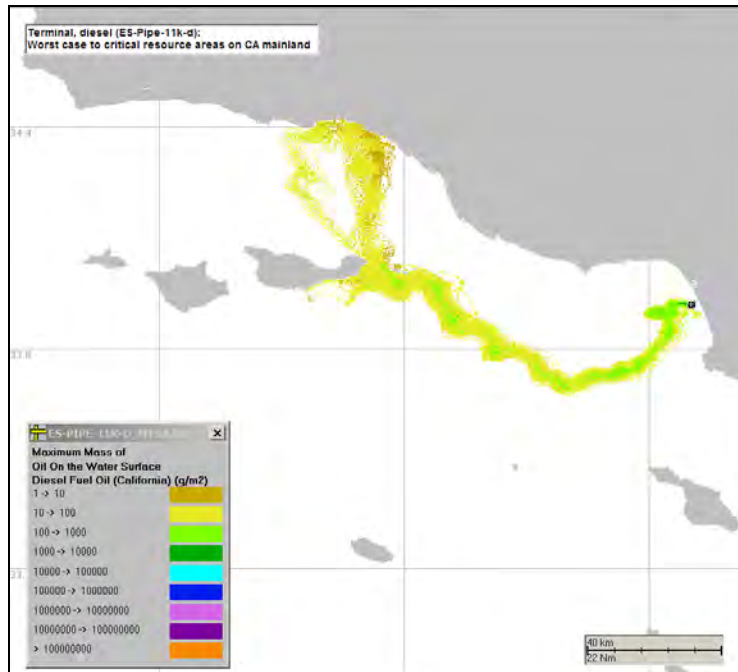


Figure C.6-1. Terminal, diesel (ES-Pipe-11k-d): Maximum exposure at any time to floating oil (g/m^2) for the worst run to the California mainland shore.

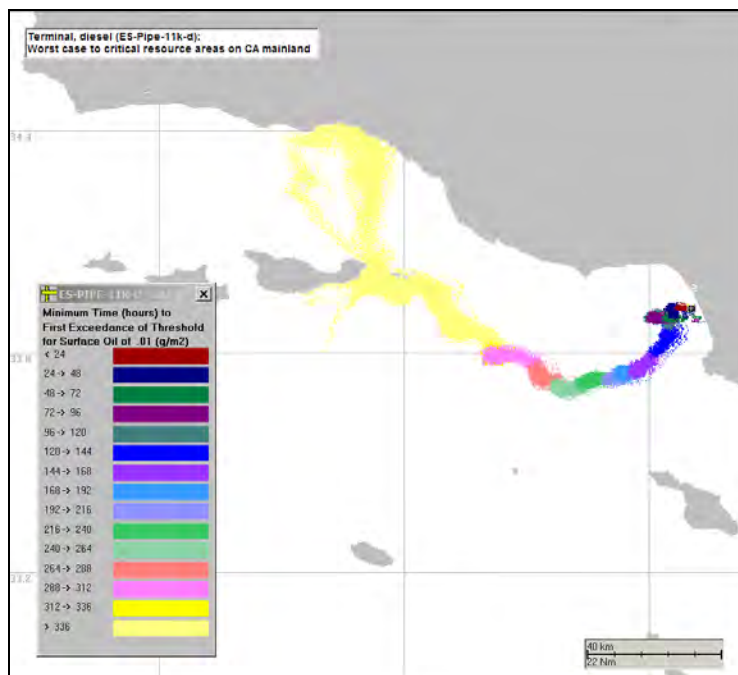


Figure C.6-2. Terminal, diesel (ES-Pipe-11k-d): Minimum time to first exceed threshold for surface oil ($0.01 \text{ g}/\text{m}^2$) for the worst run to the California mainland shore.

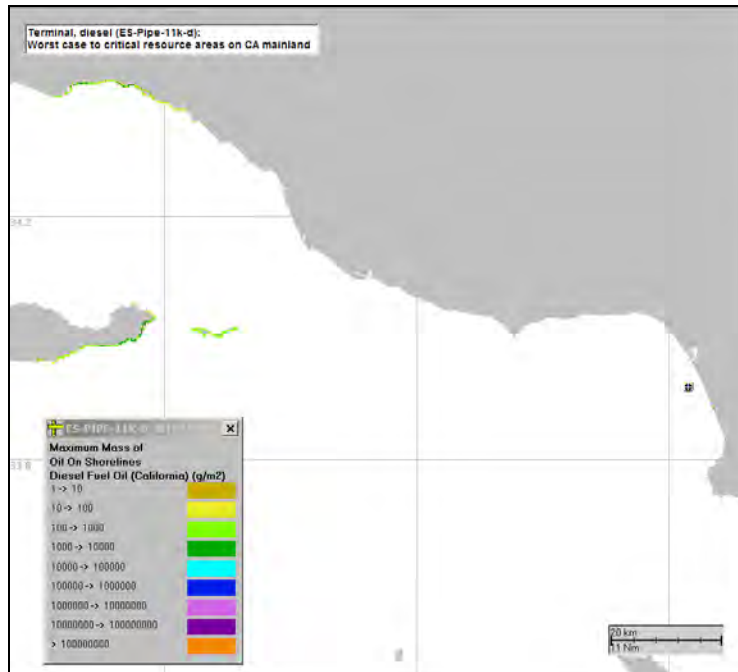


Figure C.6-3. Terminal, diesel (ES-Pipe-11k-d): Maximum mass (g/m²) of oil on the shoreline for the worst run to the California mainland shore.

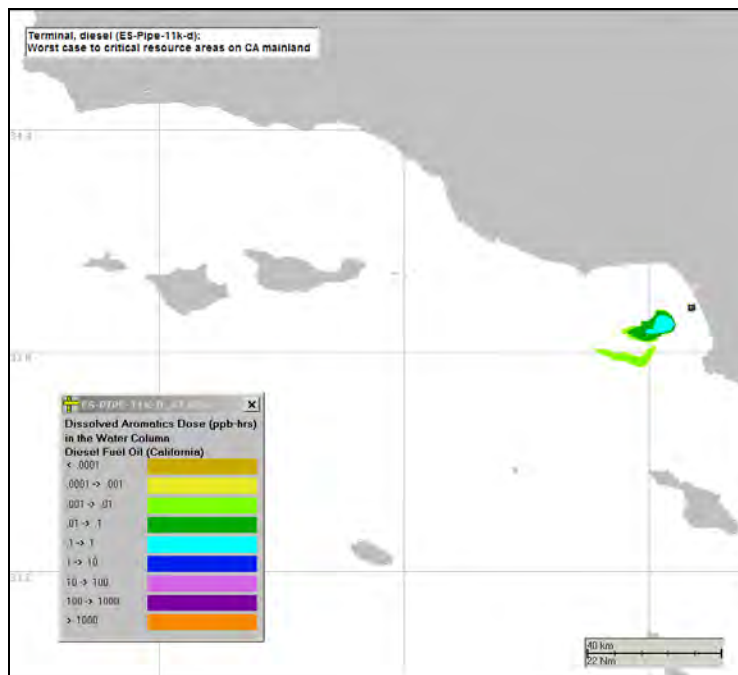


Figure C.6-4. Terminal, diesel (ES-Pipe-11k-d): Dose (ppb-hrs) of dissolved aromatics in the water column for the worst run to the California mainland shore.

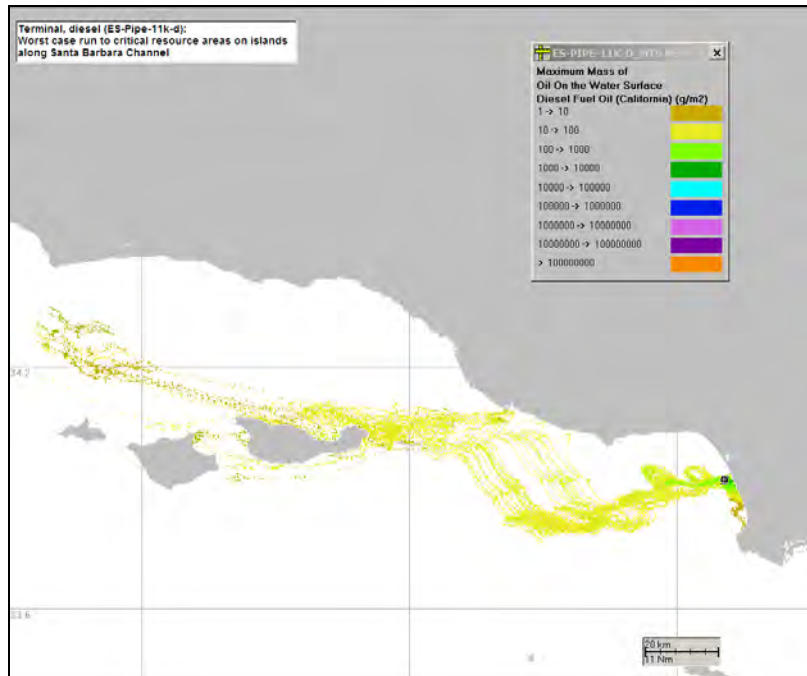


Figure C.6-5. Terminal, diesel (ES-Pipe-11k-d): Maximum exposure at any time to floating oil (g/m^2) for the worst run to the islands along Santa Barbara Channel.

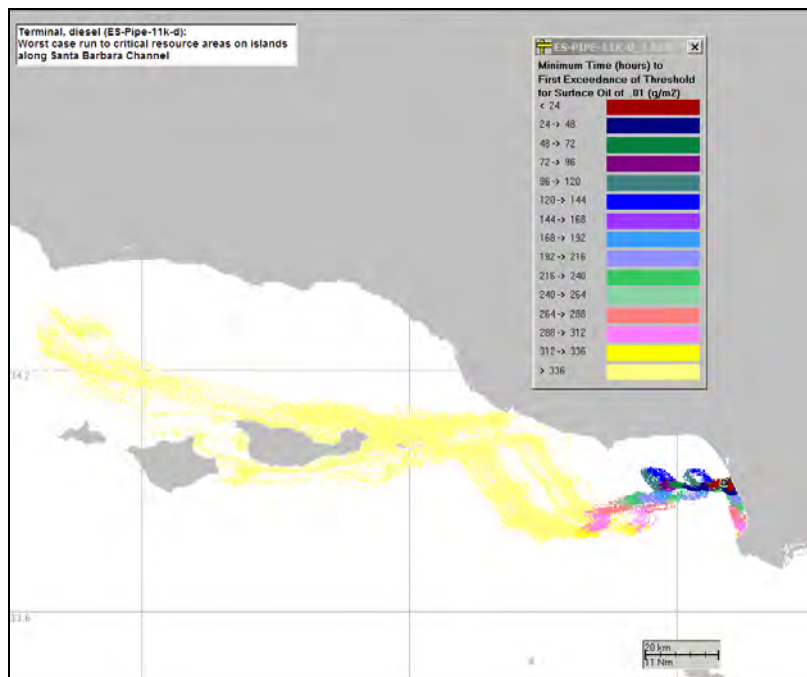


Figure C.6-6. Terminal, diesel (ES-Pipe-11k-d): Minimum time to first exceed threshold for surface oil ($0.01 \text{ g}/\text{m}^2$) for the worst run to the islands along Santa Barbara Channel.

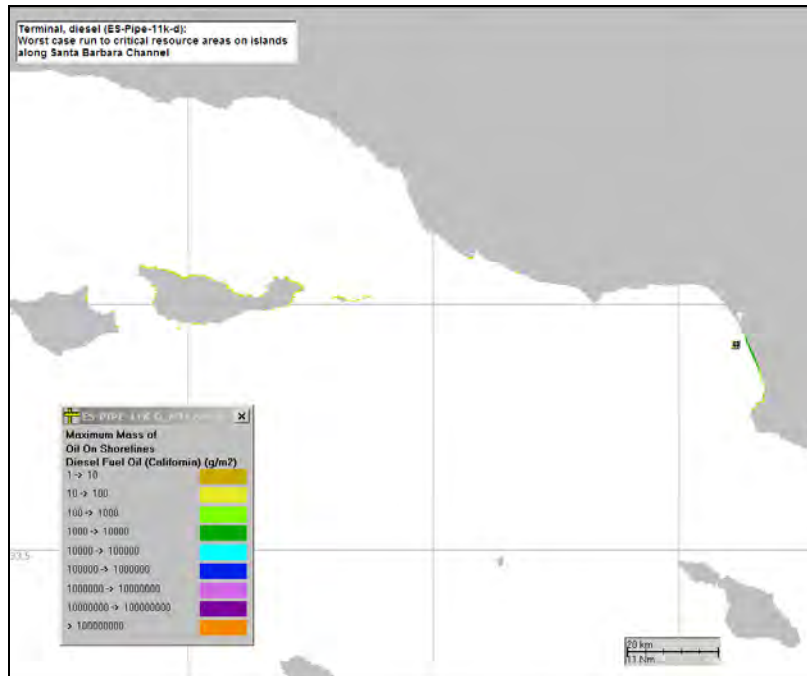


Figure C.6-7. Terminal, diesel (ES-Pipe-11k-d): Maximum mass (g/m^2) of oil on the shoreline for the worst run to the islands along Santa Barbara Channel.

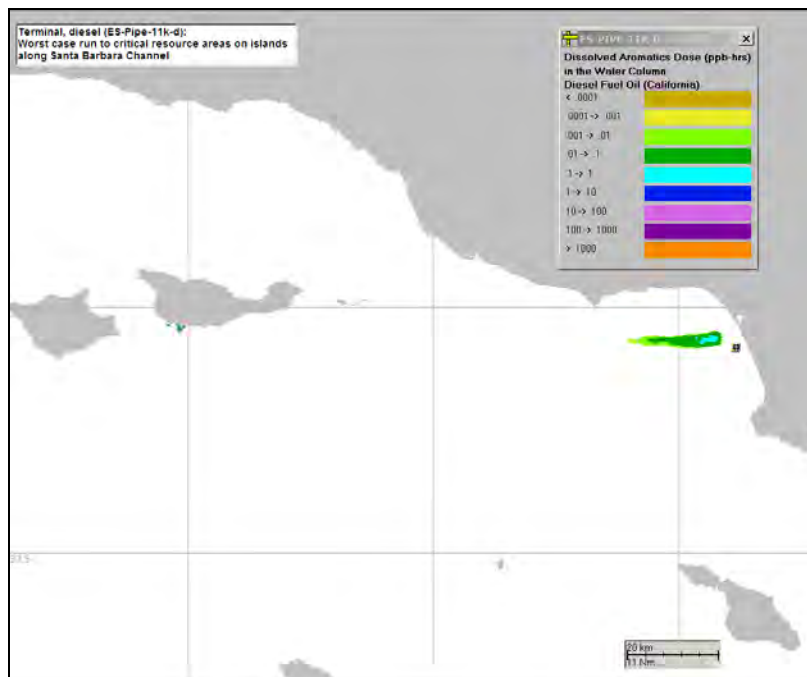


Figure C.6-8. Terminal, diesel (ES-Pipe-11k-d): Dose (ppb-hrs) of dissolved aromatics in the water column for the worst run to the islands along Santa Barbara Channel.

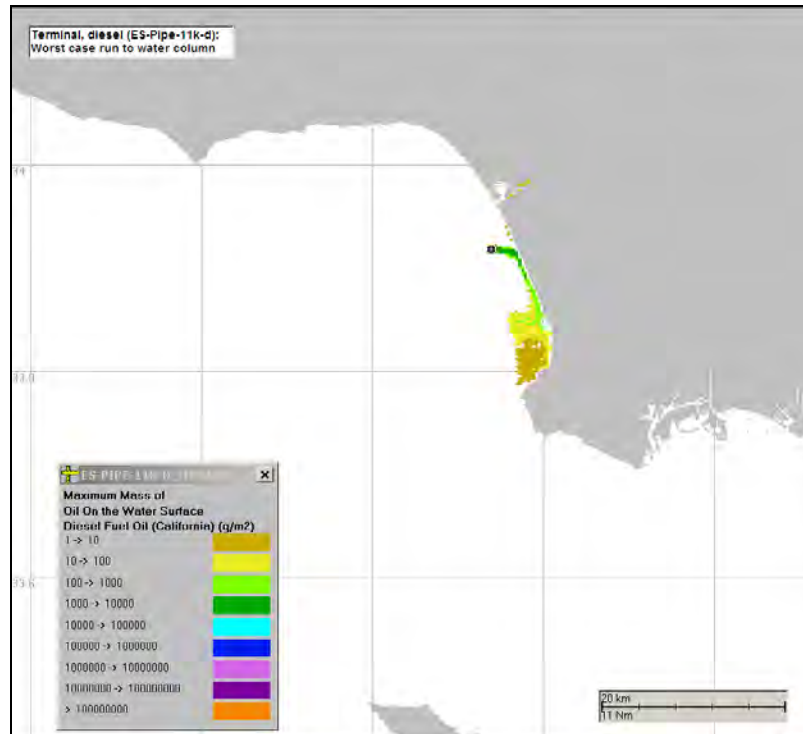


Figure C.6-9. Terminal, diesel (ES-Pipe-11k-d): Maximum exposure at any time to floating oil (g/m^2) for the worst run to the water column.

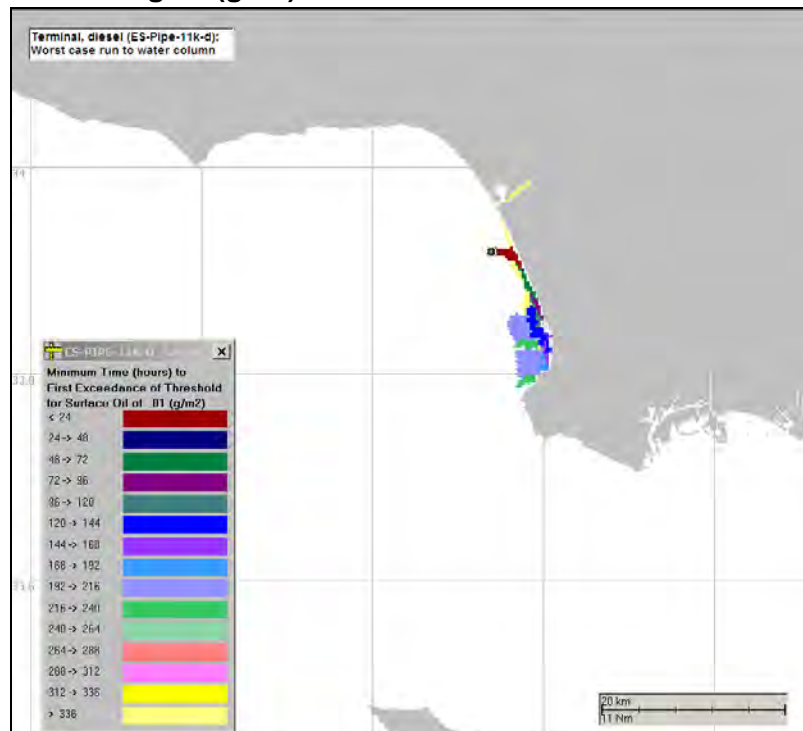


Figure C.6-10. Terminal, diesel (ES-Pipe-11k-d): Minimum time to first exceed threshold for surface oil ($0.01 \text{ g}/\text{m}^2$) for the worst run to the water column.

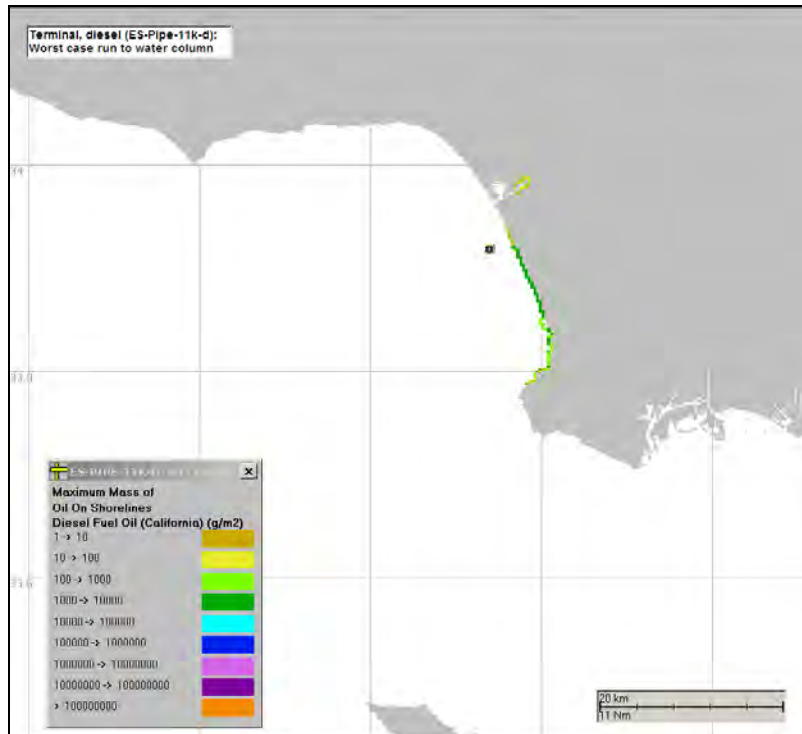


Figure C.6-11. Terminal, diesel (ES-Pipe-11k-d): Maximum mass (g/m²) of oil on the shoreline for the worst run to the water column.

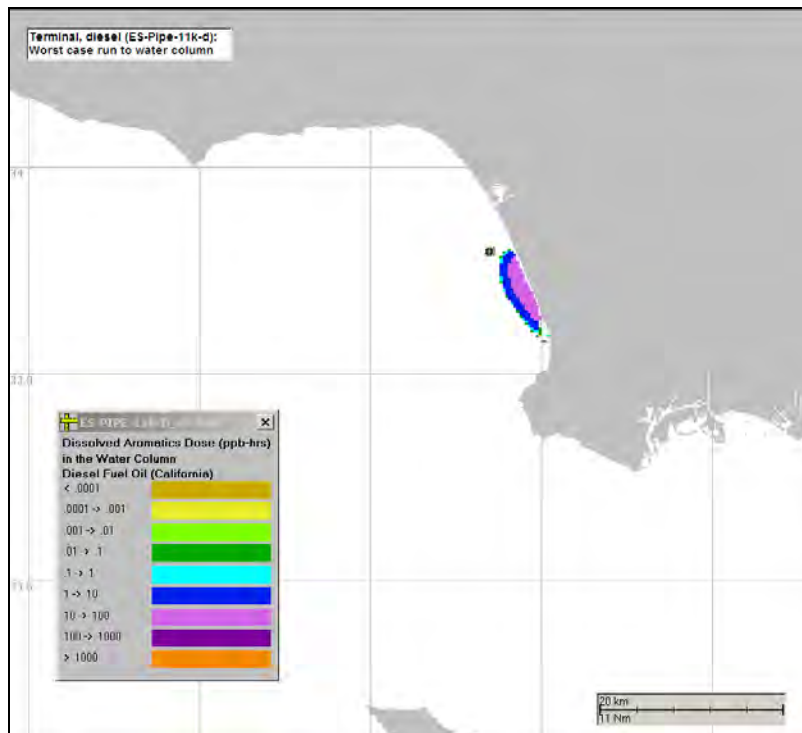


Figure C.6-12. Terminal, diesel (ES-Pipe-11k-d): Dose (ppb-hrs) of dissolved aromatics in the water column for the worst run to the water column.

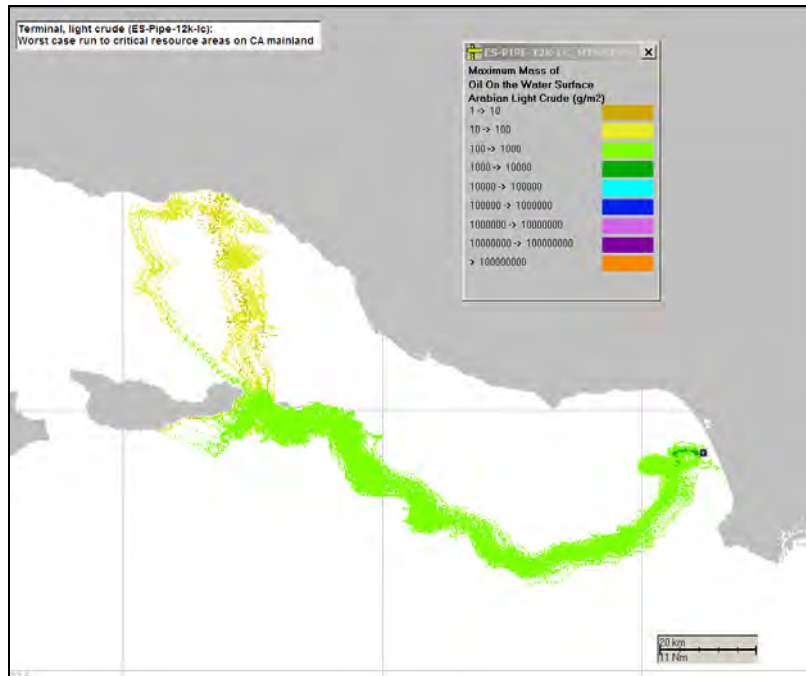


Figure C.6-13. Terminal, light crude (ES-Pipe-12k-lc): Maximum exposure at any time to floating oil (g/m^2) for the worst run to the California mainland shore.

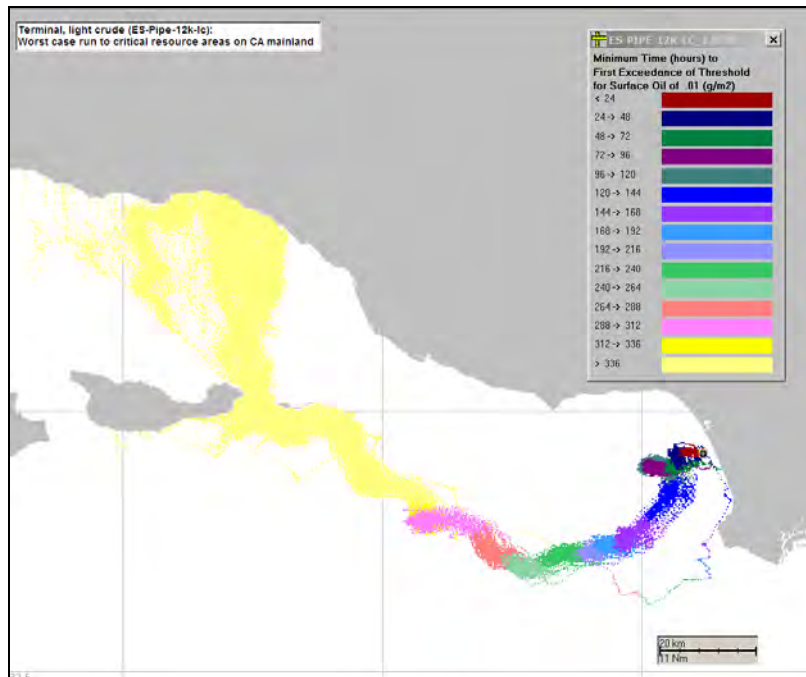


Figure C.6-14. Terminal, light crude (ES-Pipe-12k-lc): Minimum time to first exceed threshold for surface oil ($0.01 \text{ g}/\text{m}^2$) for the worst run to the California mainland shore.

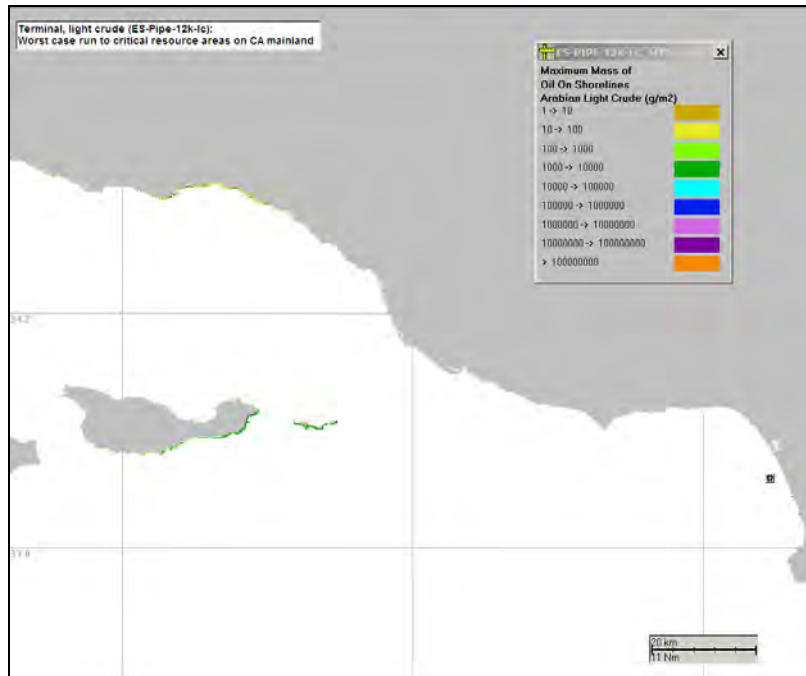


Figure C.6-15. Terminal, light crude (ES-Pipe-12k-1c): Maximum mass (g/m²) of oil on the shoreline for the worst run to the California mainland shore.

There were no significant concentrations of entrained oil or dissolved aromatics in the water column for this model run. Thus, water column exposure and impacts would be minimal.

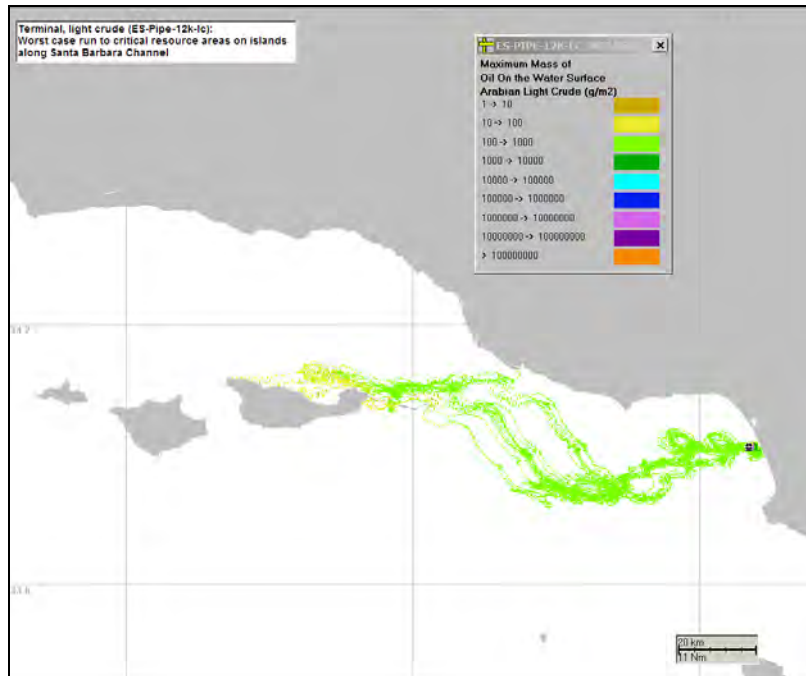


Figure C.6-16. Terminal, light crude (ES-Pipe-12k-lc): Maximum exposure at any time to floating oil (g/m^2) for the worst run to the islands along Santa Barbara Channel.

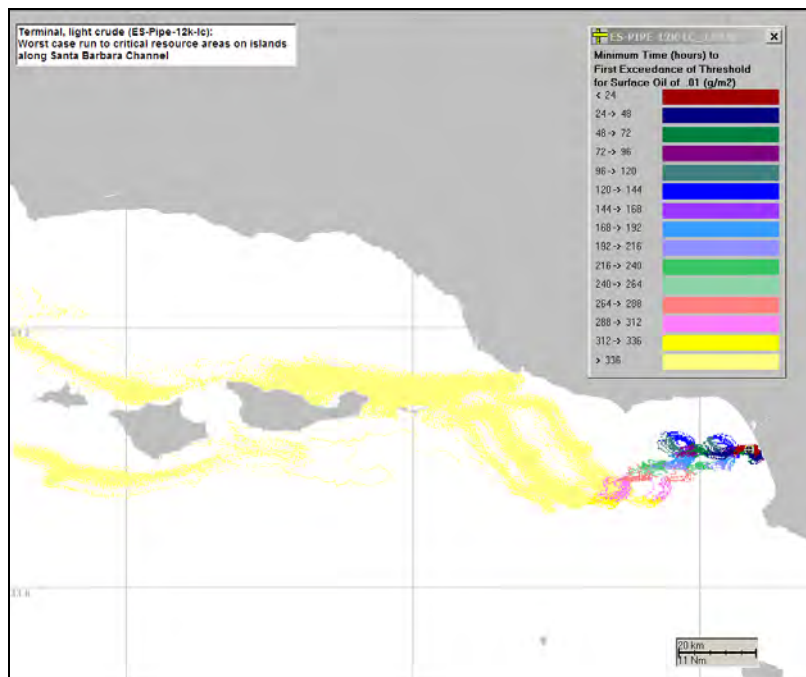


Figure C.6-17. Terminal, light crude (ES-Pipe-12k-lc): Minimum time to first exceed threshold for surface oil ($0.01 \text{ g}/\text{m}^2$) for the worst run to the islands along Santa Barbara Channel.

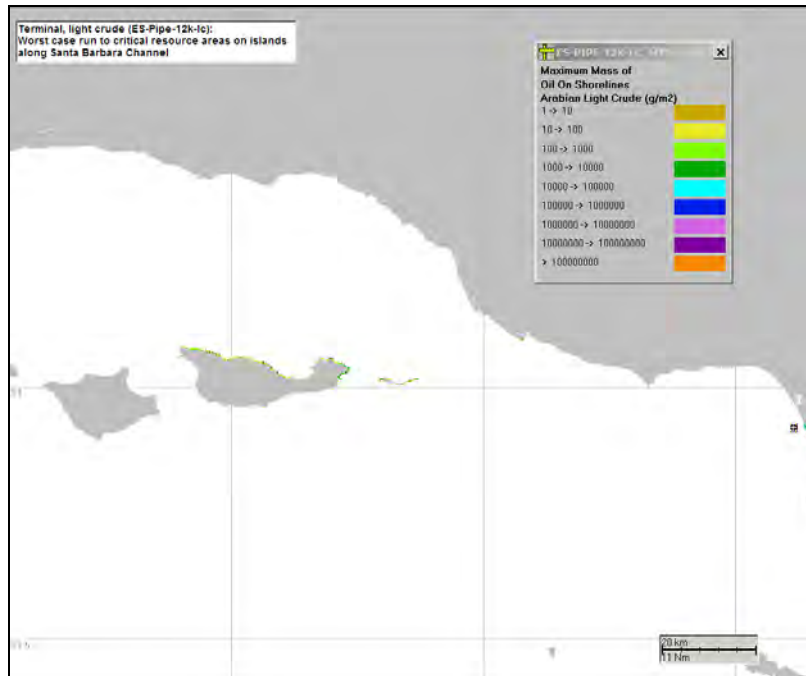


Figure C.6-18. Terminal, light crude (ES-Pipe-12k-1c): Maximum mass (g/m²) of oil on the shoreline for the worst run to the islands along Santa Barbara Channel.

There were no significant concentrations of entrained oil or dissolved aromatics in the water column for this model run. Thus, water column exposure and impacts would be minimal.

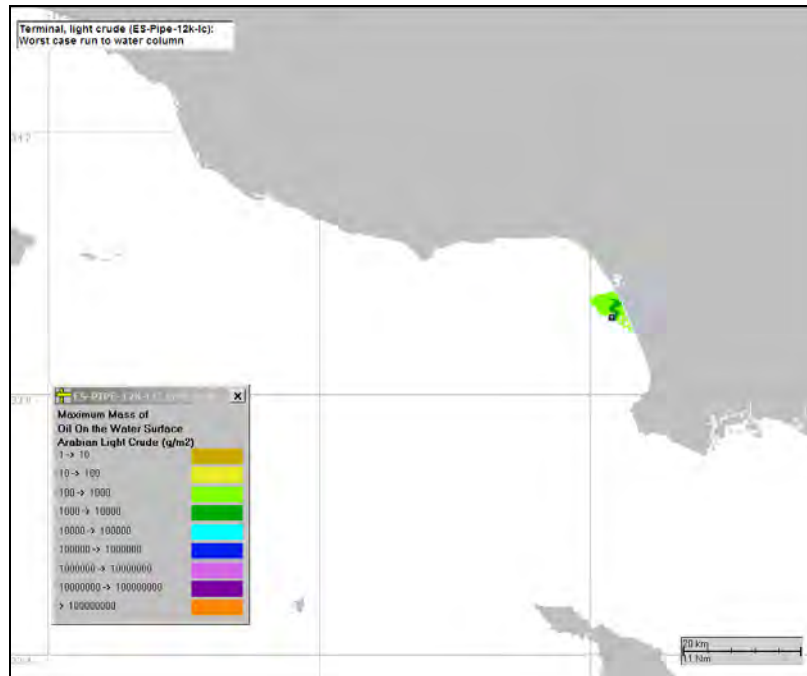


Figure C.6-19. Terminal, light crude (ES-Pipe-12k-lc): Maximum exposure at any time to floating oil (g/m^2) for the worst run to the water column.

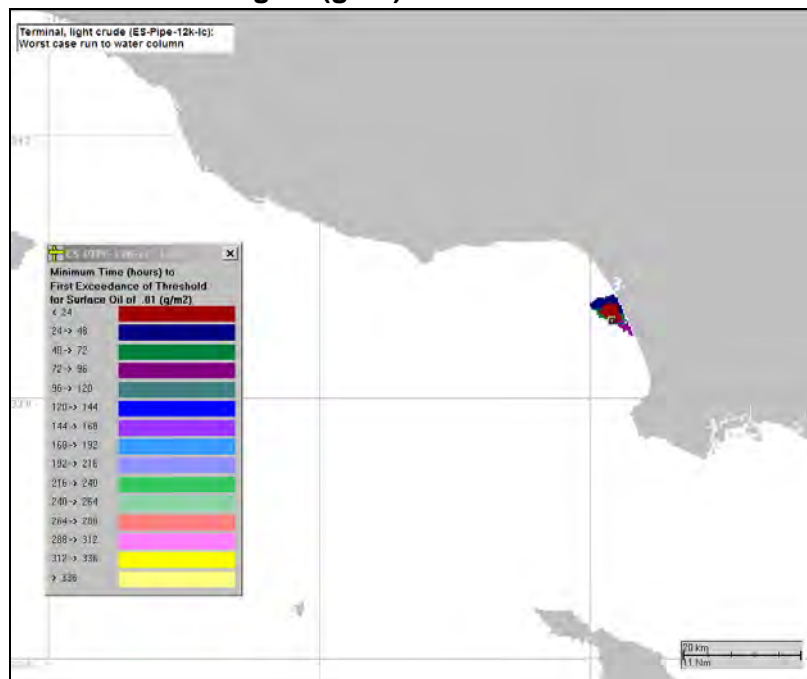


Figure C.6-20. Terminal, light crude (ES-Pipe-12k-lc): Minimum time to first exceed threshold for surface oil (0.01 g/m^2) for the worst run to the water column.

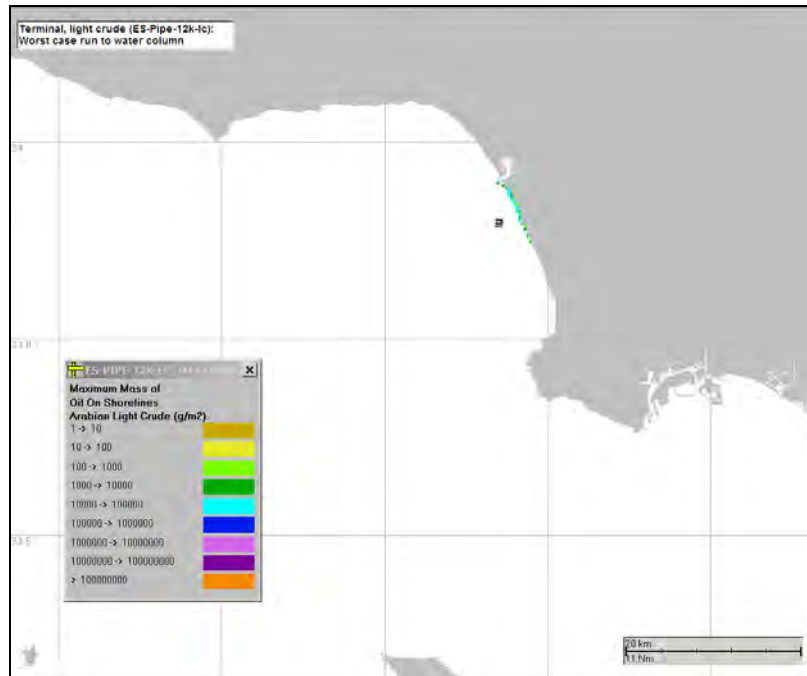


Figure C.6-21. Terminal, light crude (ES-Pipe-12k-1c): Maximum mass (g/m²) of oil on the shoreline for the worst run to the water column.

There were no significant concentrations of entrained oil or dissolved aromatics in the water column for this model run. Thus, water column exposure and impacts would be minimal.

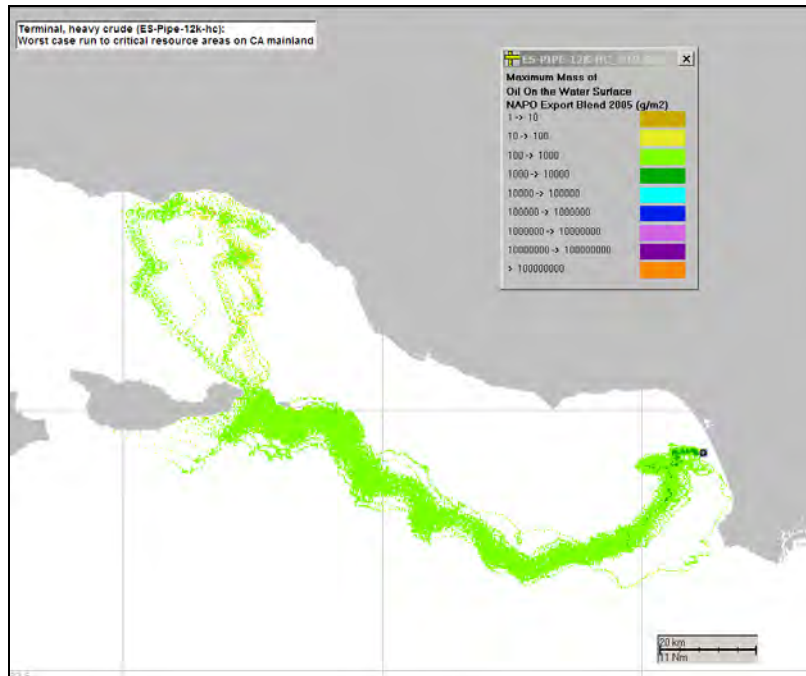


Figure C.6-22. Terminal, heavy crude (ES-Pipe-12k-hc): Maximum exposure at any time to floating oil (g/m^2) for the worst run to the California mainland shore.

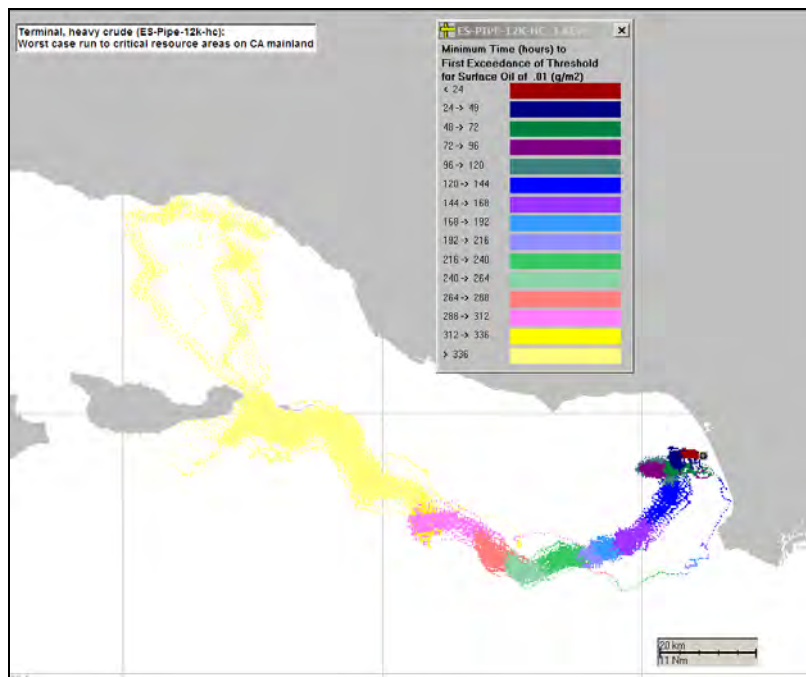


Figure C.6-23. Terminal, heavy crude (ES-Pipe-12k-hc): Minimum time to first exceed threshold for surface oil ($0.01 \text{ g}/\text{m}^2$) for the worst run to the California mainland shore.